AMENDMENTS TO THE CLAIMS

Docket No.: N0484,70571US00

1. (Currently amended) A method of evaluating grammars associated with the quality of voice input recognition by a voice portal, said method comprising the steps of:

extracting a current grammar-from the voice portal;

generating a test input for [[the]] a current grammar of the voice portal, the test input including a test pattern and a set of active grammars for the current grammar;

providing the test input to the voice portal;

analyzing the test pattern with respect to [[the]] <u>a</u> set of active grammars <u>corresponding to</u>
the current grammar with a speech recognition engine in the voice portal, the current grammar being
one grammar of the set of active grammars; and

deriving a measure of how distinguishable the current grammar is from other grammars of the set of active grammars based at least in part on the analysis of the test pattern quality of recognition for the current grammar.

- 2. (Currently amended) The method of claim 1, wherein [[said]] deriving a measure of how distinguishable the current grammar is from other grammars of the set of active grammars [[step]] includes the step of deriving a confidence level and a set of n-best results for the test input, and wherein the method further comprising the steps of: comprises comparing the confidence level and set of n-best results for the test input with an expected value to assess the measure of quality of recognitionhow distinguishable the current grammar is from other grammars of the set of active grammars.
- 3. (Currently amended) The method of claim 1, further comprising the steps of: modifying the current grammar to create a modified grammar if the <u>derived</u> measure of quality-of recognition-for the current grammar deviates from a pre-determined range.
- 4. (Currently amended) The method of claim 3, further comprising the steps of:
- (i) generating a test input for the modified grammar, the test input including a test pattern and a set of active grammars for the modified grammar;

Application No. 10/733,995 Reply to Office Action of November 13, 2008 Page 3 of 14

- (ii) providing the test input for the modified grammar to the voice portal;
- (iii) analyzing the test pattern for the modified grammar with respect to [[the]] a set of active grammars corresponding to the modified grammar with the speech recognition engine in the voice portal, the modified grammar being one grammar of the set of active grammars corresponding to the modified grammar;
- (iv) deriving a measure of quality of recognition of how distinguishable the modified grammar is from other grammars of the set of active grammars corresponding to the modified grammar; and
- (v) re-modifying the modified grammar and repeating steps (i) through (iv) until the measure of quality of recognition of how distinguishable the modified grammar is from other grammars of the set of active grammars corresponding to the modified grammar does not deviate from a pre-determined range.
- 5. (Currently amended) The method of claim 1, further comprising the steps of: modifying the test pattern to emulate one or more user voices prior to entering the test input into the voice portal.
- 6. (Currently amended) The method of claim 1, further comprising the steps of: modifying the test pattern to emulate the influence of one or more communications network qualities prior to entering the test input into the voice portal.
- 7. (Currently amended) A computer program product for evaluating the quality of voice input recognition by a voice portal, said computer program product comprising computer usable program code including a routine set of computer-readable storage medium encoded with instructions which, when executed by a machine computer, cause the machine computer to perform the steps of a method of evaluating grammars associated with a voice portal, the method comprising:

extracting a ourrent grammar from the voice portal;

generating a test input for [[the]] <u>a</u> current grammar <u>of the voice portal</u>, the test input including a test pattern and a set of active grammars for the current grammar;

providing the test input to the voice portal;

analyzing the test pattern with respect to [[the]] <u>a</u> set of active grammars <u>corresponding to</u>

the current grammar with a speech recognition engine in the voice portal, the current grammar being

one grammar of the set of active grammars; and

deriving a measure of how distinguishable the current grammar is from other grammars of the set of active grammars based at least in part on the analysis of the test pattern quality of recognition for the current grammar.

- 8. (Currently amended) The computer program product computer-readable storage medium of claim 7, wherein [[said]] deriving a measure of how distinguishable the current grammar is from other grammars of the set of active grammars [[step]] includes the step of deriving a confidence level and a set of n-best results for the test input, and wherein the method further causing said machine to perform the steps of: comprises comparing the confidence level and set of n-best results for the test input with an expected value to assess the measure of quality of recognition how distinguishable the current grammar is from other grammars of the set of active grammars.
- 9. (Currently amended) The computer program product computer-readable storage medium of claim 7, further causing said machine to perform the steps of: wherein the method further comprises modifying the current grammar to create a modified grammar if the derived measure of quality of recognition for the current grammar deviates from a pre-determined range.
- 10. (Currently amended) The computer-program product computer-readable storage medium of claim 9, further causing said machine to perform the steps of wherein the method further comprises:
- (i) generating a test input for the modified grammar, the test input including a test pattern and a set of active grammars for the modified grammar;
 - (ii) providing the test input for the modified grammar to the voice portal;
- (iii) analyzing the test pattern for the modified grammar with respect to [[the]] a set of active grammars corresponding to the modified grammar with the speech recognition engine in the voice portal, the modified grammar being one grammar of the set of active grammars corresponding to the modified grammar;

Reply to Office Action of November 13, 2008

Page 5 of 14

(iv) deriving a measure of quality of recognition of how distinguishable the modified grammar is from other grammars of the set of active grammars corresponding to the modified grammar; and

- (v) re-modifying the modified grammar and repeating steps (i) through (iv) until the measure of quality of recognition of how distinguishable the modified grammar is from other grammars of the set of active grammars corresponding to the modified grammar does not deviate from a pre-determined range.
- 11. (Currently amended) The computer program product computer-readable storage medium of claim 7, further causing said machine to perform the steps of: wherein the method further comprises modifying the test pattern to emulate one or more user voices prior to entering the test input into the voice portal.
- 12. (Currently amended) The computer program product computer-readable storage medium of claim 7, causing said machine to perform the steps of: wherein the method further comprises modifying the test pattern to emulate the influence of one or more communications network qualities prior to entering the test input into the voice portal.
- 13. (Currently amended) A system for evaluating the quality of voice input recognition by grammars of a voice portal having a speech recognition engine, comprising:

an analysis interface for extracting a set of current grammars from the voice portal;
a test pattern generator for generating a test input for each current grammar of a set of
current grammars of the voice portal, the test input including a test pattern and a set of active
grammars corresponding to each current grammar;

a text-to-speech engine for entering each test pattern into the voice portal;

a results collector for analyzing each test pattern entered into the voice portal with the speech recognition engine against [[the]] a set of active grammars corresponding to the current grammar for-said-a respective test pattern, the current grammar being one grammar of the set of active grammars; and

Page 6 of 14

a results analyzer for deriving a set of statistics <u>indicative of how distinguishable of a quality</u> of recognition of each current grammar of the set of current grammars is from other grammars of the corresponding set of active grammars.

- 14. (Currently amended) The system of claim 13, wherein the set of statistics includes a confidence level and a set of n-best results for each test input, and wherein the results analyzer is configured to compare the confidence level and set of n-best results for each test input with an expected value to assess the quality of recognition of how distinguishable each current grammar of the set of current grammars having said test input is with respect to other grammars of its corresponding set of active grammars.
- 15. (Original) The system of claim 13, wherein the test pattern generator is configured to modify each test pattern to emulate one or more user voices prior to entering the test input into the voice portal.
- 16. (Previously presented) The system of claim 13, wherein the test pattern generator is configured to modify each test pattern to emulate the influence of one or more communications network qualities prior to entering the test input into the voice portal.
- 17. (New) The system of claim 13, further comprising an analysis interface for extracting the set of current grammars from the voice portal.